UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washingt n, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
08/886,881	07/02/97	ECKSTEIN	J	PA1220-C2

IM71/0428

MCDERMOTT WILL & EMERY
227 W MONROE STREET
CHICAGO IL 60606

EXAMINER	
TARAZANO,D	
ART UNIT	**PAPER NUMBER**
1773	

DATE MAILED: 04/28/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 08/886,881	Applicant(s) Eckstein et al.
	Examiner D. Lawrence Tarazano	Group Art Unit 1773

☒ Responsive to communication(s) filed on *Feb 9, 1999* .

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-3, 7, 8, 10-16, 18, 23-26, 35-37, 41-49, 51, 56-59, 71-81, and 92-97* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-3, 7, 8, 10-16, 18, 23-26, 35-37, 41-49, 51, 56-59, 71-81, and 92-97* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *2, 3*

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Election/Restriction

The applicants have canceled all non-elected species.

Specification

1. The disclosure is objected to because of the following informalities: On page 5, second paragraph the applicants have used the word "cell" instead of "site".

Appropriate correction is required.

2. The use of the trademark "SURLYN" , "EXACT", "BYNEL" "PLEXAR", "ADMER" etc... have been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Priority

3. This application filed under former 37 CFR 1.62 lacks the necessary reference to the prior application. A statement reading "This is a continuation of Application No. 08/653,520, filed 05/15/95 which is a continuation of Application No. 08/082,226, filed June 23 1993." should be

entered following the title of the invention or as the first sentence of the specification. Also, the current status of the parent nonprovisional application(s) should be included.

The examiner notes that priority to this application has not been checked on page 1 of Declaration, but it appears this was intended.

It also appears that the applicants current file lacks copendency with 08/653,520; the previous application was abandoned several days prior to the filing date of the instant application.

Claim Rejections - 35 USC § 112

4. Claims 15 and 48 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The applicants recite that they are making LDPE materials by single site catalysis. It is well accepted in the art that the term LDPE is a highly branched material made by a high pressure process. This clearly goes against the art of single site catalysis which produces materials having low or no branching (for example see Lai et al. 5,272,236 column 3, lines 47+). It is well accepted in the art that low density polyethylene and linear low density polyethylene have different structures. It appears in the absence of showing to the contrary that the applicants have made reference to the wrong material.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The applicants have been given an effective filing date of 07-02-97 since it appears that they lack copendency.

6. Claims 1-3, 7-8, 10-16, 18, 35-37, 41-49, and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Lai et al. (5,272,236).

Lai et al. teaches films made from polymers produced using single site catalysts, see example 10 and the abstract.

The materials are copolymers of butene, hexene and octene (column 3, lines 41+).

They can be formed into blends (column 14, lines 31+)

7. Claims 1-3, 7-8, 10-14, 16, 18, 35-37, 41-47, 49, 51, 71-75 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hodgson et al. (5,376,439).

Hodgson et al. teach narrow molecular weight polyethylene materials that have been formed into films comprising high density polyethylene cores (column 2, lines 45+). While Hodgson et al. do not specify state the they are using single site catalysts, this can be inferred by their reference to the new generation of polymers having narrow molecular weights and the fact that Exxon has been a pioneer in this area.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 23-26, 56-59, 71-81, and 91-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's own admission (pages 3-4) in view of either Lai et al. (5,272,236) or alternatively in view of Schut, Plastics Technology, "Enter a New Generation of Polyolefins", November, 1991 pp 15-19.

Applicants discloses that it is conventional to produce films having a barrier layer and a layer of polyolefin material; however, it is not conventional to use polyolefin material made by single site catalysts.

Both Lai et al. (column 20, examples 10 and 11, and table VII)) and Schut (table I) teach that polymers made using single site catalysts have improved properties over polymers produced by conventional routes such as Ziegler/Natta catalysis. Films produced using polymers made using single site catalysts have improved Dart impact strength, are clearer, and have lower haze than those made using conventional polymers having the same density. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use polymers produced using metallocene catalysts in place of polyethylene made using Ziegler/Natta catalysis in conventional structures comprising a barrier layer, in order to produce clearer films with improved Dart impact strength.

10. Claims 23-26, 56-59, 92-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newsome (4,457,960) in view of Lai et al. (5,272,236).

Newsome teaches a heat shrinkable film which comprises a barrier layer (a) to which is adhered a layer (b) comprising LLDPE (claim 4), Newsome also states that one of the LLDPE polymers which is suitable in the production of the film is 2045 available from Dow.

Lai et al. teaches ethylene-alpha olefin copolymers, wherein said alpha-olefins have 3-20 carbon atoms (see claim 1, and claims 21-36), and they further teach that these polymers show improved properties over DOWLEX 2054 (column 18, line 55), and also examples 10 and 11. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use polymers of the type disclosed by Lai et al. in place of DOWLEX 2054 in the

structure taught by Newsome, in order to produce the films taught by Newsome having the improved properties suggested by Lai et al, including improved processibility, higher Dart impact strength, and higher clarity.

11. Claims 71-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller (4,891,253) in view of either Lai et al. (5,272,236) or alternatively in view of Schut, Plastics Technology, "Enter a New Generation of Polyolefins" , November, 1991 pp 15-19.

Mueller teaches a moisture barrier medical film comprising a core of high of high density polyethylene, to which is adhered a layer of VLDPE (see column 4, line 49); however, Mueller does not specify using polymers made using single site catalysts.

As discussed above, Lai et al. or Schut teach ethylene/alpha-olefin polymers having improved properties over analogous polymers having the same density produced using Ziegler/Natta catalysis. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use polymers of the type taught by Lai et al. or Schut in order to produce the films taught by Mueller having higher clarity, improved processibility, and higher Dart impact strength.

12. Claims 76-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schirmer (4,803,122) in view of either Lai et al. (5,272,236) or alternatively in view of Schut, Plastics Technology, "Enter a New Generation of Polyolefins" , November, 1991 pp 15-19.

Schirmer teaches multi film which comprise an oxygen barrier layer (a), and a heat sealable layer (b), comprising linear low density polyethylene, (columns 5-6), and the structure can further comprise a layer of nylon or PET (claim 4); however, Schirmer does not specify the use of polymers made using single site catalysts.

As discussed above, Lai et al. or Schut teach ethylene/alpha-olefin polymers having improved properties over analogous polymers having the same density produced using Ziegler/Natta catalysis. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use LLDPE polymers of the type taught by Lai et al. or Schut in order to produce the films taught by Schirmer having higher clarity, improved processibility, and higher Dart impact strength.

13. Claims 23, 25, 56, 58, 80-81, and 97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (4,695,491) in view of either Lai et al. (5,272,236) or alternatively in view of Schut, Plastics Technology, "Enter a New Generation of Polyolefins" , November, 1991 pp 15-

14. Kondo et al. teach applicant's invention (example 1), but is silent regarding the use of polymers made using single site catalysts.

As discussed above, Lai et al. or Schut teach ethylene/alpha-olefin polymers having improved properties over analogous polymers having the same density, but produced using

Ziegler/Natta catalysis. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use polymers of the type taught by Lai et al. or Schut in order to produce the films taught by Kondo et al. having higher clarity, improved processibility, and higher Dart impact strength.

It is well known in the art of plastics processing to eliminate adhesive layers wherein sufficient adhesion exists between the layers, this is a common cost saving measure, and applicant's claims directed to the presence of an adhesive layer would have been obvious variations, since the inclusion and deletion of adhesive layers is within the routine skill of the artisan depending on the desired adhesion between the layers

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Lawrence Tarazano whose telephone number is (703) 308-2379. The examiner can normally be reached on M-F from 8:30 am to 5:30 pm.

The official fax number for the art unit is (703)-305-3599. The special fax number for amendments after final is (703)-305-5408. The number for unofficial faxes is (703)-305-5436.

D. Lawrence Tarazano
Patent Examiner

April 26, 1999